

APPENDIX I

STRUCTURE DEMOLITION AND REMOVAL MISSION SOP

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APPENDIX I STRUCTURE DEMOLITION AND REMOVAL MISSION SOP

1. **Purpose.** FEMA may task the Corps to remove damaged structures in order to remove potential threats to public health and safety. These structures may be commercial, residential, floating, or mobile home type structures. They, for the most part, will be privately owned facilities. Therefore, extreme care must be taken to ensure the mission is executed legally and properly. Failure to secure the proper documentation may result in the government purchasing the home and property and a costly lawsuit.

2. **References.** Mission Doctrine Guide

3. **Applicability/Responsibility.**

- a. Process Owner: Mississippi Valley Division
- b. Process Team: Mission PRT
- c. Customer: FEMA and State

4. **Intergovernmental Team.** The USACE Action Officer, FEMA Infrastructure Branch Chief and/or FEMA Public Assistance Officer, Debris Task Force Leader, and State Coordinating Officer meet to discuss expectations and to determine the support (personnel) necessary to execute the mission. For some missions a single technical assistance representative may suffice. For larger missions an expanded cadre of Subject Matter Experts, Debris Specialist, Mission Managers, Resident Engineers and other specialists may be required. Regardless of size, the expectations of the customer must be clearly defined and matched with the appropriate personnel.

5. **Staffing and Other Resource Requirements.**

a. Mission PRT Composition (Description of duties is located in Appendix D):

- Subject Matter Expert
- ESF #3 Action Officer
- Debris Specialist
- Mission Manager
- Mission Specialist
- Real Estate Specialist
- Contract Specialist
- Environmental Engineer
- Resident Engineer

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- Quality Assurance Supervisor
- Office Engineer
- Database Manager

6. **Preparedness.** The Corps should develop generic scopes-of-work, typical structure Removal Operations Management Plans for demolition and removal of damaged structures prior to a disaster. These plans and processes should be generic enough to be adaptable to the situation at hand. However, the plans are to be specific enough that every demolition and removal activity is accounted for. See Appendix C for sample plans.

7. **Execution.** Removal of damaged structures following a disaster is a very complicated process from a legal perspective. Most structures are privately owned and **must** be condemned by the **local authority** in order for any government, local, State or Federal, agency to enter the property and remove its contents. Therefore, this must be a total partnership/team process. Further, while speed is critical so that health and safety is not an issue, process and making sure everything is proper and legal is paramount.

- a. **Organizational Responsibilities.** There are several organizations that are involved in a demolition mission. Each one has a specific responsibility to the total team effort.

1) **Demolition Task Force.** Like in the standard debris removal mission, its better to form a “Task Force” whose purpose is the demolition and removal of unsafe structures. The Task Force is made up of members of the Condemnation Authority usually county or State government, FEMA and the Corps, (Debris Action Officer). If there are several agencies involved in the condemnation process then each should have a representation on the Task Force. There may be others required and if so, they should be added. The point of the Task Force is to agree to a process and a set of specific responsibilities for each, in order to have a successful mission. The Corps of Engineers **CANNOT** execute a demolition mission without full partnership of all the required players. Below is an example of a Demolition Task Force. This is a sample of how one mission was organized. Remember, the State or local government **MUST** perform the condemnation process and it is always better for the locals to obtain the rights-of-entry (ROE) and rights-of-way (ROW). The Federal government can do the ROW/ROE but it is not the best situation. Among other activities, it is the Task Force’s responsibility to set priorities and timelines. This is based on health and safety needs, political needs, and other operational matters. The Corps of Engineers, while a participant in the process, does not set the priorities.

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SAMPLE DEMOLITION TASK FORCE ORGANIZATION

AGENCY	FUNCTION
State Fire Marshall	Condemnation
State Highway Department	Rights-of-Entry/Rights-of-Way
State Department of Environmental Protection	Disposal Site
FEMA Debris Task Force Leader	FEMA Oversight/TF Chairman
Corps of Engineers Debris Action Officer	Mission Coordination

2) Action Officer. The Debris Action Officer is the Corps' representative on the Demolition Task Force. The Action Officer's responsibility is to serve as the Project Manager (PM) for the Demolition Mission and provide overall Project Management oversight of the mission. As such, the Action Officer will attend the Task Force meetings; negotiate specific duties/responsibilities between members of the Task Force. The Action Officer will be responsible for the development of the various execution plans to include schedules, but not necessarily responsible for the total development. These plans and schedules **MUST** be a total team effort.

3) Mission Manager. The Mission Manager, located at either the ERRO or the Lead District office, is responsible for mission execution. This individual coordinates and participates as necessary in the total process. He/she works between the DFO and EFO ensuring that the requirements established at the DFO are included in the work plans of the EFO. He/she coordinates with Contracting and Resources Management to ensure everything is ready and running smoothly for mission execution.

4) Emergency Field Office. The Emergency Field Office (EFO) is the center of the demolition mission. Once all the documentation is accomplished then it is the EFO that executes. The EFO negotiates with the contractor(s) on daily unit assignments and production requirements. A daily production report will be produced by the EFO. A sample format is shown in TAB 3. Also in Tab 3 is a sample bidding schedule and property tracking sheet.

b. Structure Verification. Care must be taken to ensure that the structure the contractor is located at is the one that is supposed to be demolished. A system of several checks and verifications **MUST** be established. Below are some recommended processes:

- 1 Ensure that the individual who owns or has power of attorney for the property to be demolished signs the ROE/ROW. This is a local responsibility, but the Corps should ensure the locals understand this.

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- 2 Ensure that within the ROE/ROW package, in addition to the address, the property is geo-coded and has at least two pictures, clearly showing the property and the structure. The pictures should show front and back as a minimum.
- 3 Once the ROE/ROW package is received at the EFO, assign a QA Supervisor. The QA Supervisor—with the designated inspector and, if possible, with the property owner—will physically inspect the property, compare it with the documentation and ensure it is the right location, then mark it with an assigned tracking number. Marking is recommended by using a stake marked with the appropriate number and a colored flag.
- 4 At the EFO, group, as much as possible, the structures and assign them to a contractor as a delivery order against the base contract. Each task order will have to be negotiated. It is strongly recommended to have multiple contractors involved in this operation. It will keep the prices down and production up. The contractor who works the fastest and cheapest gets more work. Average production rate should be no less than two structures per day per contractor. If mobile homes are the majority, a higher production rate can be established. Tab C shows sample tracking spreadsheets for this kind of an operation.
- 5 When the contractor is ready to start demolition, the QA Inspector will again verify that it is the right location before any work is begun.

8.0 Attached Reference Information.

- a. Debris Removal On Public Rights of Way Task Table
- b. Tab 1 – Sample Demolition Operations Plan
- b. Tab 2 – Sample Demolition Process Plan
- b. Tab 3 – Demolition Checklists

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Structure Demolition and Removal Task Table

Phase I – Preparedness

Organization	Task / Subtask Number	Task	Subtask	Who	How
FEMA	N/A	Provide funding for State/local readiness		FEMA	FEMA provides through grant money
USACE	P-1.0	Maintain Team Readiness		Many play a part in maintaining team readiness: The PRT AO, the district EM, the division EM, Readiness Support Center, Chief HLS at HQ USACE, the district commander, the division commander, the Director of Civil Works	Ensure positions are filled, the team members are trained and commanders perform readiness reviews and allocate resources to raise readiness status
	P-1.1		Fill Positions	AO in coordination with district EM and district commander	AO maintains team roster and notifies district EM of pending vacancies for EM to work new fill with district commander
	P-1.2		Train Team Members	AO in coordination with district EM and district commander. PRT members.	AO maintains training roster and coordinates with the team members to attend training when USACE Readiness Support Center (RSC) announces training. PRT Members attend training.
	P-1.3		Command Readiness Review	District Commander, Division Commander, Director of Civil Works	District Commander reviews team readiness monthly and applies or requests resources as necessary to improve readiness. Division Commander reviews team readiness quarterly and applies or requests resources as necessary to bring unready teams to a ready status. Director of Civil Works reviews team readiness quarterly and provides resources to improve readiness status as necessary.

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	P-1.4		Participate in AAR	Lead Division	Lead Division identifies SME, AOs and contractors to attend HQ USACE Level Focus Calls and AARs. Participants develop issues to be worked by lead divisions' SMEs and AOs.
	P-1.5		Update Guides, Standing Operating Procedures (SOP), ACI contracts	Lead Division	Bring together SMEs, AOs and contractors to perform annual review and update of mission documents and contracts
	P-1.6		Participate in internal and external exercises	PRT	When notified by district EM, participate in USACE internal and other agency external exercises
State	N/A	Participate in, AAR, training and exercises		State EM	State EM coordinates for participation as funding allows
Local	N/A	Participate in AAR, training and exercises		Local EM	Local EM coordinates for participation as funding allows
Contractor	N/A	Participate in AAR, training and exercises		Lead Division, responsible UASCE contracting officer, and contractor	USACE contracting officer notifies ACI contractors of need to participate and cuts task order. ACI contractor identifies personnel to attend. Non ACI contractors are identified by Lead Division and attend on their own funds.

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Phase II – Activation

Phase II A – Event With Notice

Organization	Task / Subtask Number	Task	Subtask	Who	How
FEMA		Mission Assignment		FEMA	FEMA tasks the Corps for Technical Assistance as part of ESF #3
USACE	AA-1.0	Deploy PRT		HQ USACE, Division, District	Identify team to be deployed and notify Supported and Supporting Division. Supported Division transmits MA and funds to the PRTs home district.
	AA-1.1		Notify and activate PRT	AO in coordination with district EM	AO receives notification of pending deployment from district EM and notifies PRT. When verbal MA is received, EM finalizes travel orders and team deploys.
	AA-2.0	RSOI PRT		PRT members and receiving Supported Division or designated responding organization (district)	Receiving organization establishes an RSOI location and PRT members arrive and perform RSOI. First AO into area will travel directly to duty location and perform virtual RSOI. Debris PRT into area will travel directly to duty locations and perform virtual RSOI.
State		Request Assistance		FEMA, State	State request assistance from FEMA
Local		Request Assistance		State, local	Local government request assistance from State

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Phase II – Activation

Phase II B – Event Without Notice.

Organization	Task / Subtask Number	Task	Subtask	Who	How
FEMA		Mission Assignment		FEMA	FEMA tasks the Corps for Technical Assistance as part of ESF #3
USACE	AB-1.0	Deploy PRT		HQ USACE, Division, District	Identify team to be deployed and notify Supported and Supporting Division. Supported Division transmits MA and funds to the PRTs home district.
	AB-1.1		Notify and activate PRT	AO in coordination with district EM	AO receives notification of pending deployment from district EM and notifies PRT. When verbal MA is received, EM finalizes travel orders and team deploys.
	AB-2.0	RSOI PRT		PRT members and receiving Supported Division or designated responding organization (district)	Receiving organization establishes an RSOI location and PRT members arrive and perform RSOI. First AO into area will travel directly to duty location and perform virtual RSOI. First Debris PRT into area will travel directly to duty locations and perform virtual RSOI.
State		Request Assistance		FEMA, State	State request assistance from FEMA
Local		Request Assistance		State, local	Local government request assistance from State

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Phase III – Execution

Organization	Task / Subtask Number	Task	Subtask	Who	How
USACE	E-1.0	Identify Mission		SME, DS, AO, MM, RE, EE, RS	Form a “Task Force” for the purpose of the demolition and removal of unsafe structures meeting the prescribed eligibility criteria. The task force is made up of members of the Condemnation Authority usually county or State government, FEMA, and the Corps. If there are several agencies involved in the condemnation process then each should have a representative on the Task Force. There may others required and if so, they should be added. A goal of the Task Force is to agree to a process and a set of specific responsibilities for each agency.
	E-2.0	Mission Scoping		SME, DS, MM, RE, EE, QAS, RS	Identify the amount and type of debris to be generated by the demolition. Identify the methods of disposal and/or reduction, the location for disposal, and any environmental issues related to reduction/disposal. Sector the overall area of responsibility as necessary to better facilitate the execution of the demolition mission. Define the types and numbers of personnel required to monitor the contractors’ work.
	E-3.0	Refine Mission Scope		AO, FEMA, State, local	Define or refine a mission scope with the proper ESF #3 and FEMA representatives
	E-4.0	Determine		SME, DS, MM, RE, OE, QAS, local	Determine the contract formats.

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		contracting			Determine the types and amounts of contractor equipment required to execute the mission.
	E-5-0	Mission Management		PRT Team, FEMA, State, local	Assist in structural demolition and debris removal activities as necessary. Develop a field process based on procedures established by the Task Force. Establish and maintain Points of Contact with local government and other Federal agencies. Assist as necessary in the overall recovery operations as required to complete the mission.

TAB 1

DRAFT

**DEMOLITION OPERATIONS PLAN
CAMERON PARISH, STATE OF LOUISIANA
27 NOVEMBER 2005**

1. MISSION.

As directed in Mission Assignment COE-MVD-09-010, under declaration 1607-DR-LA, USACE will perform the demolition of condemned structures damaged by Hurricane Rita. For structures that are condemned and approved for demolition by the Parish, USACE will remove hazardous materials, demolish structures and transport the Construction and Demolition (C&D) debris to an appropriate landfill, as designated by the Parish, in coordination with the State. Other waste streams (e.g. E-wastes, white goods, household hazardous waste, ACM, petroleum products, and items containing ozone depleting substances, such as air conditioners) will be segregated, to the greatest extent practical, for proper handling, processing, treatment, recycling, and disposition, in accordance with applicable Federal, State, and Local requirements.

2. CONCEPT OF OPERATION.

A. Required activities: If the structure allows, the USACE will coordinate the following: (1) household hazardous wastes, (2) personal property, (3) white goods, (4) conduct a hazardous assessment, (5) remediate any hazardous materials, (6) disconnect the utilities, (7) demolish the condemned structure, (8) load and transport the resulting debris to a designated landfill.

B. Environmental concerns:

- 1) Asbestos. Best management practices will be incorporated to address suspect asbestos containing materials. As such, friable ACM that can create unacceptably high emissions will be removed prior to demolition. Additionally, ACM not meeting Cat I and II classifications and/or that which cannot be disposed of in a Type III landfill, will be removed prior to demolition.
- 2) Freon. Since the structures have been condemned, the Contractor will not be required to enter the structures to determine if there is anything on the site that contains Freon. If, in the process of demolition, items that might contain Freon are found, they will be handled in such a way as to minimize opportunities to allow the Freon to escape. To the greatest extent practical, Freon will be removed and recycled by appropriately licensed/certified personnel. Further details will be covered in the "Method of Disposal" section.
- 3) Historic Preservation. The Parish will be required to provide the State and FEMA the necessary and appropriate notice of intent to demolish any fixed structures (not manufactured housing) that may be over 50-years old, which may be on or eligible for the National Register of Historic Places. Following notification, FEMA, in conjunction with the State Historic Preservation Office, will document these structures within 24 hours. This documentation will generally involve photographs as required in a Memorandum of Agreement (MOA) with the State Historic Preservation Office in accordance with Section 106 of the National Historic Preservation Act.

C. Demolition of Structures.

- 1) The USACE Contractor will demolish condemned structures, as identified by Cameron Parish. The Contractor is not required to enter structurally unsound structures prior to demolition. As part of Best Management Practices, the Contractor will assess the structure for removal of hazardous materials (e.g. E-waste, white goods, household hazardous waste, petroleum products, ACM, and ozone depleting

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substances) and determine how to safely remove from structurally compromised structures. These waste streams will be segregated, processed, treated, recycled, and disposed of in accordance with applicable Federal, State, and Local requirements. The Contractor shall apply sufficient wetting to the structure and resultant debris during demolition and loading such that fugitive emissions are maintained below regulatory limits. The Contractor shall also line and tarp trucks before transportation to staging\disposal areas. The Contractor will be responsible for demolishing the structure from the ground level up and collecting the debris in the basement, if any is present. The Contractor will not be responsible for demolishing slabs, basements, septic tanks, or anything at or below ground level. The Contractor will not fill septic tanks, basements or in-the-ground swimming pools (if identified for demolition in the ROE), but will collapse the walls of any basements and swimming pools so as to provide a uniform slope. Septic tanks will not be removed or demolished by the Contractor. The USACE and their Contractors will not be liable for any open holes or pits resulting from the demolition operations. The Corps Contractor will accomplish no site restoration of any kind.

- 2) The Contractor will not begin demolition of any structure until approved by Cameron Parish and USACE. Cameron Parish and USACE will provide representatives to be on site with a Contractor representative prior to demolition activities to insure the proper structure is demolished. The USACE will coordinate the order in which structures are demolished, starting location, and direction of work with Cameron Parish. Based on coordination with the Parish, the USACE will work on outlying structures first and proceed towards the center of Cameron.
- 3) Prior to demolition, Cameron Parish and/or USACE and its Contractors will be responsible for obtaining all legal documents necessary for the demolition. Cameron Parish will also be responsible for insuring all utilities are disconnected from the structure prior to any demolition.

D. Collection, Transportation, and Disposal of debris.

The USACE Contractor will collect, load and haul all Demolition debris and General debris, as directed, from the demolition site and transport it to the appropriate landfill(s). The State and Cameron Parish will identify acceptable disposal sites.

- 1) Neither USACE nor their Contractors will be responsible for the demolition debris once it is delivered at the designated landfill. The USACE Contractor will provide the Cameron Parish representative at the landfill a copy of the Waste Shipment Record (WSR) for each load delivered. An authorized Cameron Parish representative, or its Contractor, will sign the WSR indicating acceptance of the load and releasing USACE and their Contractor from any further responsibilities.
- 2) Any potential asbestos containing material, or other hazardous material identified in the assessment process, will be removed separately by the Contractor and handled using all Best Management Practices. Potential asbestos materials will be handled using the following best management practices: (1) obvious potential asbestos containing materials will be removed and separated from the structure and disposed of in an appropriate manner. This includes transite siding and asbestos roofing materials, (2) the structure will be wetted immediately prior to and during demolition, (3) all appropriate personal protective equipment (PPE) will be utilized and (4) all applicable Federal, State, and Local requirements for potential ACM will be maintained

E. Method of disposal. Once the debris is delivered to the landfill, USACE will no longer be responsible for the material. Any suspect asbestos containing material or other hazardous material identified in the assessment process will be disposed of according to LDEQ guidance.

F. Permits. All applicable/required permits, rights of entry, hold harmless agreements, etc. will be obtained by Cameron Parish, prior to any demolition in coordination with the Cameron Parish and the State.

3. RESPONSIBILITIES.

US ARMY CORPS OF ENGINEERS.

- 1) Provide personnel on site and at landfills while demolition is being conducted.
- 2) Obtain a Contractor to execute the mission in accordance with this agreement.

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- 1) Provide technical advisor and consultant point of contact.
 - 2) Obtain all rights of entry and permits.
 - 3) Identify appropriate landfill sites and assist with arranging for final disposal of the debris.
 - 4) In conjunction with the Parish, condemn the properties and provide a list of condemned structures and priorities.
 - 5) Forward to FEMA Region VI, collected demolition/debris removal related insurance proceeds from insured landowners.
- 4. REPORTING.** Regular reporting will be accomplished. The reporting cycle will be daily. Issues concerning the mission and responsibilities will be brought forth as they happen, but will be reflected in the progress report. A Demolition Task Force, consisting of representatives of all involved agencies, will meet daily to coordinate priorities and issues. Progress reports will be provided to all partners in this agreement.

TAB 2

SAMPLE DEMOLITON PROCESS PLAN

During development of the Demolition Operations Plan, several issues concerning asbestos were raised. It was determined that all mobile homes and manufactured homes would be assumed to NOT contain asbestos. If in the course of demolition asbestos is discovered, then demolition will cease and the task order will be modified as necessary. Structures other than mobile homes and manufactured homes will be treated as not containing asbestos unless there is evidence of asbestos on the exterior of the structure. If in the process of demolition it is determined that asbestos is present the procedure will be the same as discussed above.

The process for demolition will be as follows:

1. West Virginia Department of Highways – Rights of Way (WVDOH/ROW) delivers demolition package to the U. S. Army Corps of Engineers (USACE) representative. This package will contain information on the structure as far as location, pictures, and all signed rights of entry/hold harmless agreements.
2. The USACE will issue a task order to a contractor.
3. The contractor will prepare a bid against the task order.
4. USACE will negotiate the bid and issue a notice to proceed (NTP).
5. Prior to demolition, a team, consisting of representatives from WVDOH/ROW, USACE, and the contractor, will visit each site to insure proper identification of the structure to be demolished.
6. The contractor will demolish the structure and transport the resulting debris to the proper landfill, as designated by the State.
7. The West Virginia Department of Environmental Protection (WVDEP) will be responsible for the operation of the Wyoming County landfill and, if required, the McDowell County landfill.
8. Debris transported to the Raleigh County landfill will be charged a tipping fee.

All demolition debris containing asbestos will be transported to the Wyoming County landfill. If it becomes necessary, the WVDEP will open the McDowell County landfill. Asbestos may also be transported to the McDowell County landfill if it becomes available.

Debris from sites in McDowell, Wyoming, and south Raleigh Counties will be transported to either the Wyoming County or the McDowell County landfill, as available. Non-asbestos debris from sites in Boone, north Raleigh, and Fayette Counties will be transported to the Raleigh County landfill.

The mission is scheduled to last approximately 60 days. When the demolition rate falls to less than 2 per day, the USACE will consider the mission complete.

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TAB 3

DEMOLITION CHECKLISTS

Real Estate Checklist:

- ____ Be in possession of a letter from the City/County setting forth nature of ownership/interest in "public" buildings to support their authority for demolition?
- ____ Have a copy of any/all ordinances which authorizes City/County to condemn "private" structures?
- ____ Have a copy of resolution by local government with appropriate authority required to support adoption/enactment of ordinances of other local laws required to condemn, demolish and remove public buildings.
- ____ Resolution that work requested of the U.S. Government is eligible and agrees to:
 - Provide without cost to the U.S. Government all lands, easements and Rights-of-Way necessary for the accomplishment of the approved work; and hold and save the U.S. Government free from damages due to the requested work, and shall indemnify the Federal Government against any claims arising from such work.
- ____ Designate/authorize a representative to provide the U.S. Government with Rights-of-Way?
- ____ Execute right-of-entry and hold-harmless agreements that have been signed by owner or renter with all appropriate?
- ____ Have list showing clear and complete description of structures designated for demolition.
 - This list should include identification of related structures, trees, shrubs, fences and other items to remain. Provide "written" notice to property owners of proposed demolition, and scope of demolition?
- ____ Ensure the property owner understands that the Government is only removing the hazards.
 - Grading, seeding or otherwise performing finish work is the responsibility of the owner.
- ____ For Trailer Parks have rights of entry from the Trailer Park Owner. The Mobile Home may be condemned and the Corps have all the appropriate documentation, but the Mobile Home park is generally owned by someone else. ROE is required here too.

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Engineering/Construction Checklist:

- ____ Give notice to property owners/renters to remove personal property in advance of demolition.
- ____ Document name of owner on title, complete address and legal description of property and include source of information.
- ____ Notify owner/renter of any and all site inspections
- ____ Verify that all personal property has been removed from public/private structure(s)
- ____ Verify that building is unoccupied immediately prior to demolition
- ____ Insure that property is properly posted
- ____ Insure that segregation, temporary storage removal and transportation of all HTW materials is made to a "permitted" facility prior to building demolition.
- ____ Photograph the property immediately prior "to" and immediately "after" demolition.
- ____ Locate, mark, turn off and cap water and sewer lines.
- ____ Locate (mark, if underground), and shut off electrical service and disconnect meters.
- ____ Locate, mark, shut off natural gas service disconnect meters and cap.
- ____ Flag septic tank locations prior to bringing equipment on premises.